

REMARKS

The status of Serial No. 09/707,505 has been updated, as requested by the Examiner.

Claim 1 has been amended to remove the phrase containing the statement that the monomeric halogenated flame retardant is one that is "adapted" for use in polyurethane foams in order to overcome the rejection under the first and second paragraphs of Section 112. Any person of ordinary skill in the art, from an examination of page 2, line 14 to page 3, line 2 of the pending application, would however realize that such monomeric flame retardants are well known in the field of flame retarding such foams. Two representative classes are the halogenated phosphate esters and the polybrominated diphenyl oxides. Removal of these grounds of rejection is therefore requested.

Claim 1 has also been clarified to indicate that the "amount" that is mentioned in the latter part of that Claim is measured on a "weight" basis.

In Claim 1 the phrase "on a number average basis" is intended to indicate that "n", which is clearly a number, can be an averaged value of all the species that might be present. It is common for a variety of differing species having differing individual "n" values to be present and the resulting averaged "n" value can therefore be a non-integer, e.g., 3.7, within the claimed range. Therefore, the term "about" in Claim 1 is not deemed to be indefinite since decimal values can exist when mixtures of different oligomers are present, which is normally the case.

Claim 1 has also had the words "can range" changed to read "ranges" to overcome the Examiner's objection to the presence of the word "can".

Finally, in Claims 4 and 5 the word "about" before 50% has been removed so that values below 50% are no longer encompassed.

The rejection of the pending Claims 1, 3, 5, and 6 as unpatentable over EP 255,381 in view of Hardy and further in view of Sicken is respectfully traversed.

EP 255,381 teaches a four-component flame retardant system where two of the components are: a dialkylalkanolaminodialkylphosphonate and a poly(organophosphate/phosphonate). Persons of ordinary skill in the art would therefore know that the "poly" reagent required by this reference has a direct phosphorus-to-hydrocarbon or phosphorus-to-hydrogen bond, as required in any phosphonate structure, whereas the present invention relies upon the use of a phosphate as component (b) which has only -OR substituents bonded to the phosphorus atoms contained therein. If anything, EP 255,381 teaches away from the selection of a phosphate in place of a hybrid phosphate/phosphonate choice.

The lack of suggestion of the claimed invention by the EP patent is not cured by the additional citation of both Hardy and Sicken. In fact, Hardy as well as Sicken, which both relate to phosphate ester compositions, would not be combined with the EP citation since the latter two references describe flame retardants that are not phosphonates whereas the primary reference EP patent, as described above, only suggests using a hybrid phosphate/phosphonate component. Any replacement of the EP's hybrid structure phosphonate-containing structure with the chemically distinct Hardy/Sicken phosphate

material(s) would really amount to a destruction of the EP intent of having *phosphonate* moieties in its flame retardant additives.

The rejection of the pending Claims 1, 2, 4, and 6 as unpatentable over Biranowski in view of Hardy and further in view of Sicken is also respectfully traversed.

Biranowski also points in the direction of selection of a phosphonate-containing flame retardant since it requires the use of one or more polyglycol hydrogen polyphosphonates. Actually, this primary reference is deemed even more remote from the present invention than the previously discussed EP 255,381 citation since Biranowski shows no phosphate moieties in its phosphonate reagent at all.

The lack of suggestion of the claimed invention by Biranowski is not cured by the additional citation of both Hardy and Sicken. In fact, Hardy as well as Sicken, which both relate to phosphate ester compositions, would not be combined with Biranowski since Biranowski, as described above, only suggests using a particular *phosphonate* component, whereas the Hardy/Sicken citations only teach a phosphate choice. Any replacement of the Biranowski's phosphonate structure by the chemically distinct Hardy/Sicken phosphate material(s) would really amount to a destruction of the Biranowski intent of having a *phosphonate* moiety in its polyglycol hydrogen polyphosphonate flame retardant additive.

For the reasons just given, it is requested that all Section 103 grounds of rejection be removed since EP 255,381 and Biranowski require phosphonate-containing flame retardants and both Hardy and Sicken point in the opposite direction: using a chemically distinct class of organophosphorus flame retardant: a phosphate.

Allowance of Claims 1-6 is requested in view of the amendments and comments contained herein.

Respectfully submitted,

Richard P. Fennelly

Richard P. Fennelly
Attorney for Applicant
Reg. No. 25,677

Akzo Nobel Inc.
7 Livingstone Avenue
Dobbs Ferry, New York 10522-3408
(914) 674-5464
6114am-2.doc